

# Montana DEQ Forest Fire Smoke Advisory

**August 29, 2007**

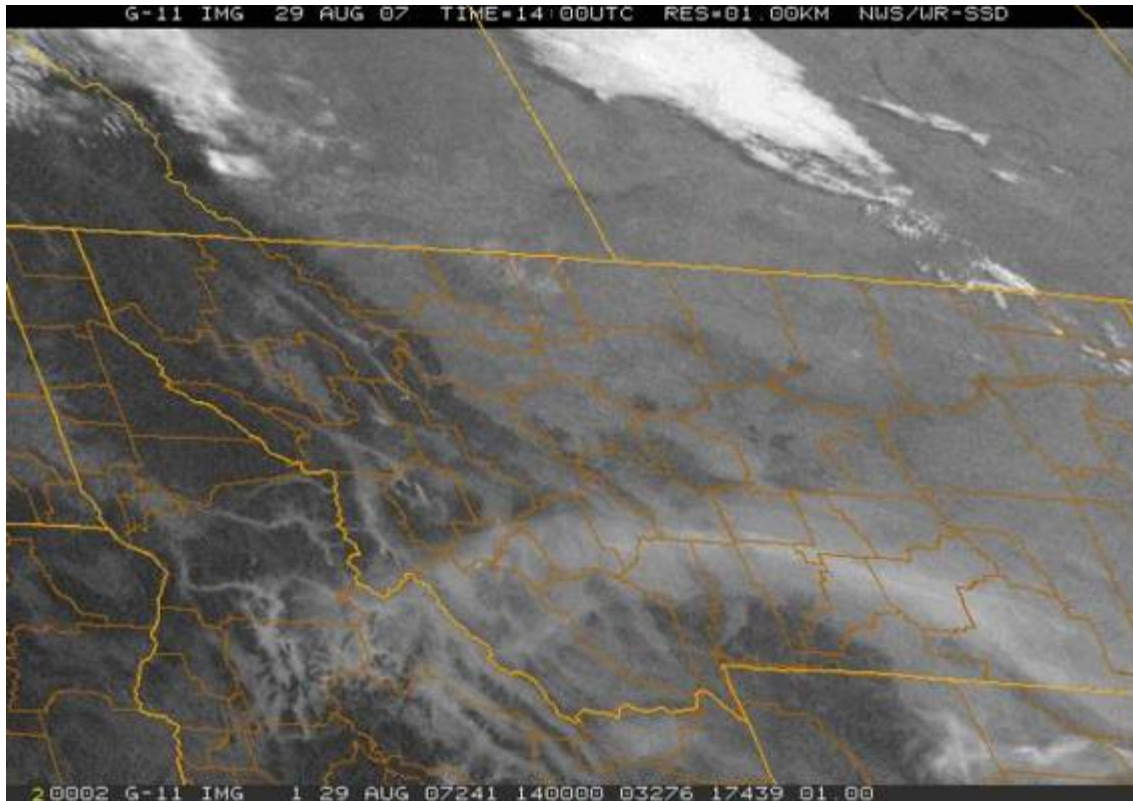
**10:00 AM Wednesday**

## **FORECAST:**

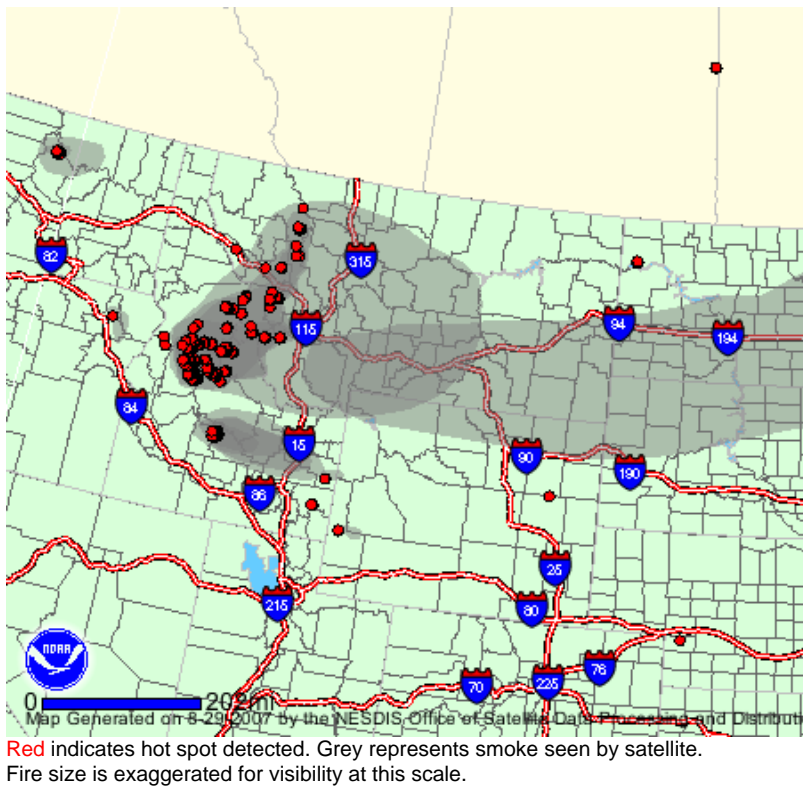
Fire activity was light in most areas yesterday but very strong nocturnal inversions in the valleys of western Montana are producing unhealthy or moderate conditions in most areas west of the divide this morning. A smoke plume aloft stretching across the southern third of the state is causing hazy skies there.

Smoke conditions in some of the valleys of western Montana could stay bad all day with the smoke and low sun angle preventing enough surface heating to mix the morning inversions out. The southern Bitterroot, the Rock Creek/ Flint Creek area, the Butte area, and the Big Hole valley in particular may see no relief today. Warmer, southwest flow later tomorrow ahead of a trough headed this way late in the week may mix these areas out by tomorrow afternoon. Smoke aloft will mix down across the southern part of the state and hazy skies will be very noticeable there. Hotter and dryer conditions over the next couple of days will produce more smoke from the local fires and direct plume impacts from local fires could be a problem this afternoon and evening. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is illustrated below:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage).



To identify individual fires on graphic above go here:

[http://activefiremaps.fs.fed.us/lq\\_fire2.php](http://activefiremaps.fs.fed.us/lq_fire2.php)

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

## Montana DEQ Forest Fire Smoke Advisory August 29, 2007

10:00 AM Wednesday

### DISCUSSION:

Clear skies under a strong ridge have produced very intense valley inversions in many areas of western Montana. Smoke trapped under the inversions has built up to [unhealthy for sensitive](#) levels in Kalispell and Butte. Whitefish, Missoula, Hamilton, and Bozeman are at [moderate](#) right now and could get worse. The Bitterroot Valley, the Big Hole Valley, the Rock Creek and Flint Creek Valleys, and the Butte area are all packed with smoke visible on this morning's satellite photo. The smoke is aloft over southern plains east of the divide but will mix down later this morning. The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to determine current conditions.

[John Coefield](#)

Meteorologist

Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

**Updated 10 AM August 29, 2007**

These advisories represent conditions between midnight and 8 AM and may change substantially throughout the day.

<a href="#">HAZARDOUS</a>	
<a href="#">VERY UNHEALTHY</a>	
<a href="#">UNHEALTHY</a>	
<a href="#">UNHEALTHY FOR SENSITIVE GROUPS</a>	Kalispell T24 Butte T24
<a href="#">MODERATE</a>	WhitefishT24 Missoula T24 Hamilton T24

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm) (est)	Visibility value from twice/day reporting stations estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.